ing Center and the National Training Center have shown that the fast, efficient delivery of critical supplies by air has a direct effect on a unit's ability to continue the fight. Training soldiers to serve on drop-zone support teams is a cost-effective method of improving sustainment capabilities during peacetime and war; a drop zone support team's level of training can determine whether air-dropped supplies arrive on target or fall into enemy hands.

DZST training is open to any unit, regardless of its mission requirements. Commanders who take advantage of it will improve their units' ability to resupply themselves by air when all attempts by ground have failed or are otherwise impractical.

The DZST Mobile Training Team mission schedule for the remainder of Fis-

DZST MTT SCHEDULE REMAINDER FY 1994 03 JAN - 07 JAN 94 24.JAN - 28.JAN 94 07 FEB – 11 FEB 94 28 FEB - 04 MAR 94 28 MAR - 01 APR 94 11 APR - 15 APR 94 25 APR - 29 APR 94 09 MAY - 13 MAY 94 23 MAY - 27 MAY 94 06 JUN - 10 JUN 94 20 JUN - 24 JUN 94 11 JUL - 15 JUL 94 25 JUL – 29 JUL 94 08 AUG - 12 AUG 94 12 SEP -16 SEP 94 26 SEP 30 SEP 94

cal Year 1994 is shown here. A commander who is interested in this training should contact his division G-3 Air to request a class date as soon as possible.

Class dates are reserved on a first-come, first-served basis. All funding and support for the DZST MTT is the responsibility of the using unit, but Pathfinder Branch will provide qualified instructors, class hand-outs, and the applicable publications.

The point of contact for information and coordination is 1st Battalion, 507th Infantry, ATTN: Pathfinder Branch (DZST), Fort Benning, GA 31905; telephone (706) 545-3218/1111 or DSN 835-3218/1111.

Captain Paul S. Warren served as chief of the Advanced Airborne Operations Detachment, 1st Battalion, 507th Infantry and now commands a company in the battalion. He previously served in the 82d Airborne Division and led a rifle company in the 25th Infantry Division. He is a 1987 ROTC graduate of Texas Christian University.

Airborne OperationsRecovery From Tree Landings

CAPTAIN DAVID A. McBRIDE

Most soldiers assigned to airborne units for any length of time have seen a paratrooper miss the drop zone and land in a wooded area. The jumper involved either passes through the trees and hits the ground or becomes entangled. A jumper who is hanging in a tree should always try to free himself if he can do so without undue risk of injury. Sometimes he can step out of the harness or climb down, using the tree's trunk and branches. But if he is higher in the tree, can't reach the trunk or a sturdy branch, or is injured, he may have to be rescued.

Airborne units are required to include emergency landings in pre-jump training. SH 57-1, *The Jumpmaster Checklist*, describes the steps a jumper should

take when he realizes he is about to land in the trees. The checklist says that "after landing in a tree, a parachutist may have to activate the reserve chute and climb down the suspension lines on the outside of the canopy." Field Manual (FM) 57-220, Basic Parachuting Techniques and Training, describes these steps in greater detail and with the following warning: "Make sure the reserve reaches the ground or comes close to it before continuing with the following actions."

Unfortunately, though, neither manual covers techniques for conducting a rescue when the jumper can't or won't free himself (occasionally, a jumper may refuse to try for fear that any movement on his part will cause the parachute canopy to release itself and cause him to crash to the ground). Equally lacking is information on training and equipping the drop zone support team. As a result, most tree rescues are based on trial and error and depend to a large extent on the experience of the recovery detail and the jumper.

In an attempt to fill this gap, I would like to share a good working technique for getting a jumper out of a tree. This technique grew out of my experience in a variety of airborne assignments (the 75th Ranger Regiment, the Ranger Training Brigade, a long-range surveillance unit, and the Joint Readiness Training Center); it does not reflect the official policy

of any agency or command. The only equipment required is one 120-foot climbing rope, two snaplinks, and some climbing spikes.

The technique includes the following steps, as illustrated in the accompanying sketches:

Figure 1:

• The jumper activates his reserve,

making sure it hangs to its maximum length. He does not disconnect the chest strap or jettison equipment that he may still have with him.

- He attracts the attention of the recovery detail or fellow jumpers equipped with climbing ropes and snaplinks.
- The recovery detail designates one climber (equipped with climbing spikes

and one end of the climbing rope that has an end-of-the-line bowline with two snaplinks) to climb until he can attach one end of the snaplinks and the rope to the drogue chute of the jumper's reserve. If climbing spikes are not available, the climber may climb or be hoisted to a point from which he can reach the drogue chute. If this does not work, the

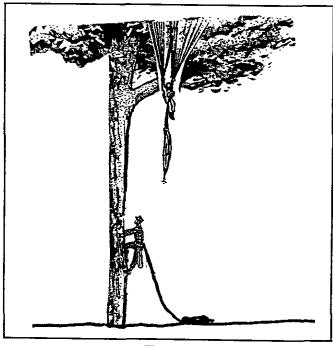


Figure 1

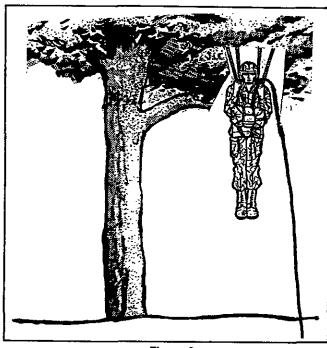


Figure 2

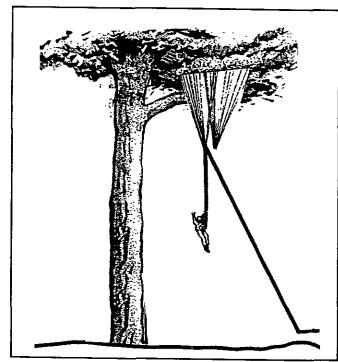


Figure 3

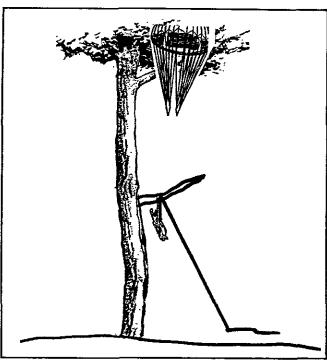


Figure 4

end of the rope should be weighted and tossed up to the jumper.

• The jumper retrieves the reserve rope and snaplinks from the drogue chute.

Figure 2:

- If the jumper is not within reach of any branches or the trunk of the tree, the climber uses the rope to pull the jumper closer so he can reach a branch or the trunk for support.
- The jumper connects the snaplink to one of the riser assemblies, routes the second snaplink through the first, and connects it to one of the D-rings of the main lift web. (Or he may choose to route the climbing rope over a sturdy branch instead of through the riser assembly.)
- The jumper disconnects the waist band and removes the reserve parachute. He balls up the reserve and tosses it to the ground, making sure it does not snag on lower branches and get in his way as he descends.
- If his rucksack and weapon have not been jettisoned, the jumper may elect to use the climbing rope to lower them to the ground. This is particularly important if the jumper has sensitive or mission-essential equipment with him, or if the height is such that a fall may destroy the frame of his rucksack.

Figure 3:

- The recovery detail secures the running end of the rope and prepares to belay the jumper. The detail must consist of enough soldiers to control the jumper's body weight.
 - The jumper tries to take his weight

off the parachute risers by grabbing or stepping on limbs or by wrapping his legs around the tree trunk.

- The jumper releases both cable-loop canopy release assemblies, one at a time. His weight is now supported by the belay team or by tree branches.
- The jumper climbs down the tree, using any available branches or the tree trunk. The belay team provides slack as needed. Or, if necessary, the belay team lowers the jumper to the ground.

Figure 4:

• If the jumper is higher than 60 feet (one-half of the climbing rope), the recovery detail may have to connect two ropes together. If the tree has a sturdy branch at a lower level, about mid-way down, this may not be necessary; the jumper can stop on this branch and reroute the climbing rope down from the riser assembly and over the branch before trying to descend the rest of the way.

The following are some additional comments on the technique:

In Figure 1, if the jumper realizes he can't reach the ground safely using the reserve, then he must release the reserve and lower it to the ground so it won't get tangled with other branches or the rope.

In Figures 1 and 4, the climber should attempt to reach the jumper by using the 120-foot rope to secure him and pull him to the tree trunk or a nearby branch. If the climber cannot do either of these things, he climbs to the point of attachment or above the jumper; secures the rope around a branch that will support the jumper using the rope with an end-of-line bowline with snaplink, and then

lowers the jumper. The jumper secures it to the left or right D-ring. The belay team takes up the slack in the rope, the jumper activates the riser assembly, and the belay team then lowers him to the ground safely.

In Figure 3, the recovery detail throws the 120-foot rope to the jumper, or a climber delivers it. The jumper takes one of the snaplinks and attaches it to the riser assembly or the male fitting of the riser assembly. The jumper routes the rope through the snaplink attached to the riser to prevent nylon-to-nylon contact between rope and riser assembly. He then releases both of the cable-loop canopy release assemblies, and the belay team lowers him to the ground safely.

This recovery technique can be conducted tactically and in limited visibility. If the expected drop zone is small or surrounded by tall trees, instruction on this technique should be part of the prejump training. Since many actual recoveries turn into fiascoes with white lights and loud commands, the tactical implications of this technique are obvious, especially if the jumping element is small or the loss of jumpers or secrecy will have an immediate effect on the tactical operation.

The most important consideration is to get the jumper out of the tree quickly, safely, and with as little damage as possible to his equipment.

Captain David H. McBride has served in a variety of airborne and Ranger assignments and is now S-3 of the 4th Ranger Training Battalion at Fort Benning. He is a 1982 graduate of the United States Military Academy.

Ambush and Patrol Techniques

COMMAND SERGEANT MAJOR DWIGHT E. ANDERSON

The Vietnam War has been described as a squad leader's war and, in my case, it was. I served more than six months of my one-year tour in 1969 as a squad leader in the 1st Marine Division. Many of the lessons we learned are still useful today.

A Marine rifle platoon at that time con-

sisted of three 11-man rifle squads, a 9-man machinegun squad (two M60s), and a platoon headquarters made up of the platoon leader, platoon sergeant, ra-